

The Trade policies and Economic Development of India: An Empirical Study

Prof. Uma Ghosh¹, Uppalapati Krishna Chaitanya², Sneha Chatterjee³,
B.V. Ashwini Priya⁴

¹Assistant Professor, Finance Department, Institute for Technology and Management, Mumbai

²Student, PGDM - Finance, Institute for Technology and Management, Mumbai

³Student, PGDM - Finance, Institute for Technology and Management, Mumbai

⁴Student, PGDM - Finance, Institute for Technology and Management, Mumbai

ABSTRACT: Trade policy is referred to as the regulations and agreements that control the imports and exports of one country to foreign countries. India's trade and external sector puts a significant impact on the Gross Domestic Product (GDP) growth as well as expansion in per capita income. The globalization of the production process, the market for goods as well as financial markets have been increased in the last ten calendar years from 2009 to 2018. The paper is an effort to study the impact of trade policy on India's economic growth. This study uses secondary data from Reserve Bank of India (RBI), United Nations reports and other relevant data sources to test the impact of the independent variables namely import, export, exchange rate and inflation rate on the dependent variable namely Economic development proxy by Human Development Index (HDI). The techniques used are ordinary least square regression and hypothesis test at a 5% level of significance. It has been derived that economic development due to changes in trade policies is much inclined towards changes in exchange rates and inflation than the imports and exports. Details of varied factors causing such ups and downs in the economic development are closely observed in the paper showing the macro-level understanding of the impact of each of the variables on the economic development of India. The paper also evaluates the Indian trade policies, set as a comeback to the recession phase globally, and the impact on the India Economy as compared to the recession phase of the 2008 recession and the impact on Indian Economy drawing parlance with the trade policies then.

KEYWORDS: Trade policy, Imports, Exports, Exchange rates, Consumer Price Index (CPI) Inflation rates, Development, Economic growth, Human Development Index (HDI).

Date of Submission: 01-06-2020

Date of Acceptance: 15-06-2020

I. INTRODUCTION

Trade policy is a very important concept for the economy. It helps to regulate the transactions or exchanges between two countries in a more organized manner. In short, trade policy refers to "Laws related to the exchange of goods or services involved in international trade including taxes, subsidies, and import/export regulations."

Trade policies help to evaluate the size of markets for the output of firms and hence strongly influence both foreign and domestic investment. Over time, the impact or effect of trade policies on the investment climate is growing. Changes in technology, liberalization of host nation policies for trade and investment and the growing organization of world-wide production chains within Multi-national Enterprises (MNEs) have all served to make trade policies in home and host countries alike a crucial ingredient in encouraging both foreign and domestic investment and in maximizing the contribution of that investment to development.

➤ Trade policy is concerned with seven major fields, namely:

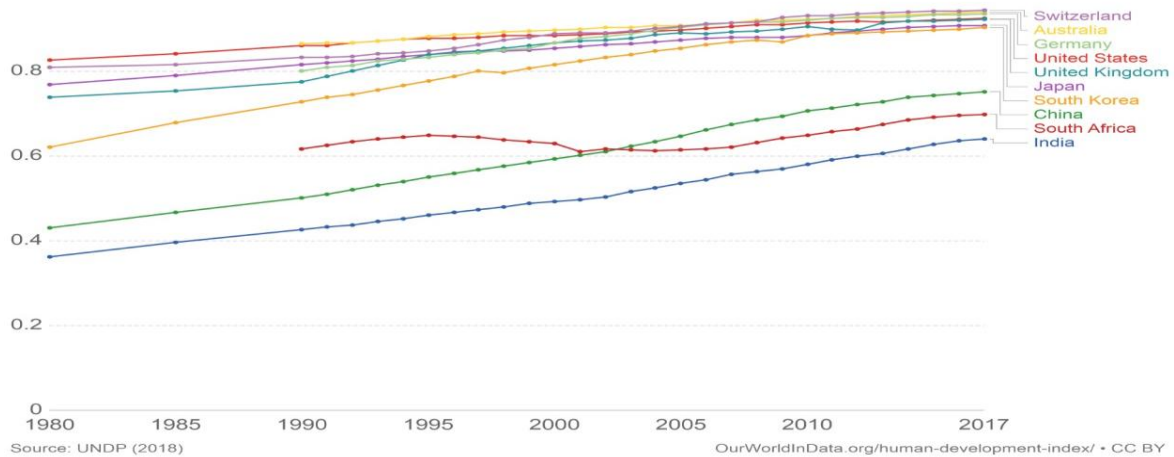
1. Custom Procedures
2. Economic uncertainties
3. International trade agreements
4. Review of trade policies
5. Trade restrictions on imported inputs
6. Home country trade policies
7. Export finance and risk mitigation.

Every trade policy is made looking at the above factors and keeping in mind the economic conditions. The major objective of a country while making the policies is to make its country an advance global player by achieving a more outward-oriented trade regime. It aims at sustained growth for the economy. Meanwhile,

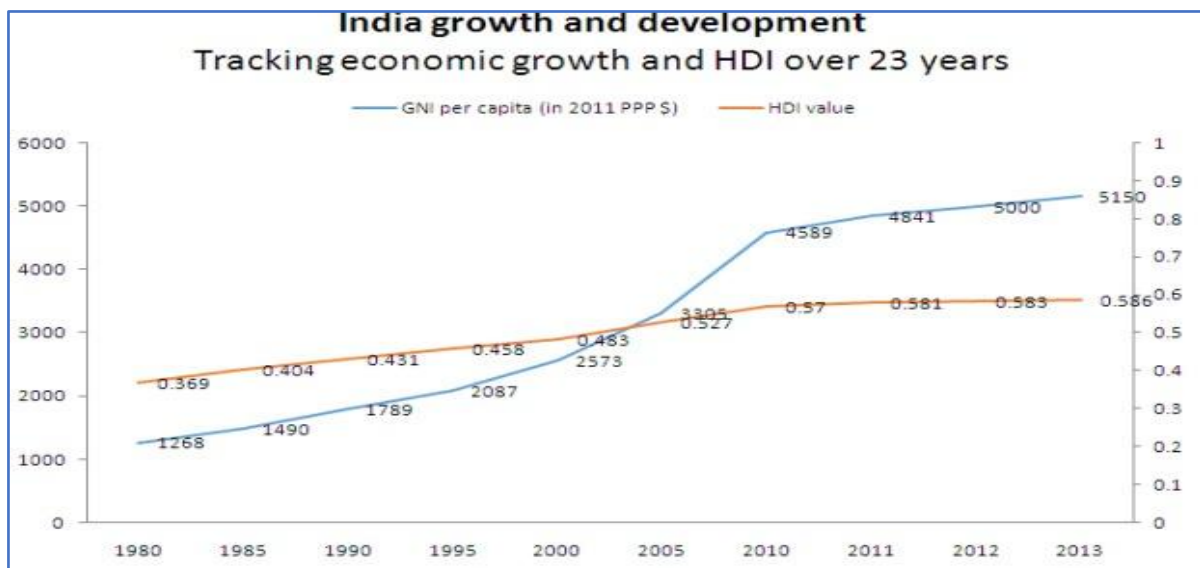
United Nations Development Program (UNDP) has a unique way of evaluating a country's development, through Human Development Index (HDI). The HDI is the simple average of life expectancy index, education index, and the per capita GDP Index, of a country. Development, therefore, is a broader concept than Growth, which (development) must be evaluated keeping in mind more than one factor.

Human Development Index

The Human Development Index (HDI) is a summary measure of key dimensions of human development: a long and healthy life, a good education, and having a decent standard of living.



The table above depicts the HDI comparison between few of the leading countries. As mentioned above, HDI is the evaluation of decent living standards, good education, human health and satisfaction of an individual in staying in a country.



(Source: https://www.business-standard.com/article/economy-policy/india-stuck-low-on-un-development-index-114072400860_1.html)

In the above figure, although India has shown a remarkable improvement in its HDI performance, it is the lowest among all the 10 countries mentioned. India is a country with highest inequality. Although the government is trying to curb its inequalities, it is a milestone that is yet to achieve.

II. LITERATURE REVIEW

(Martin Guzman, 9 May, 2018), in their study ascertained that, the exchange rate policy refers to the way a country manages its currency in respect to foreign currencies and the foreign exchange market. The paper thus analysed the role of Real Exchange Rate (RER) Policies in promoting economic development. The role of RER Policies is enhanced when they are linked with industrial transactions between countries and exports or imports. It also discusses how an effective RER implementation can be used in a foreign exchange market and regulation of capital flows. There are two major roles that RER plays in an economy, namely,

- i. The role of RER in promoting or hindering economic growth
- ii. The role of RER in exchange rate regime and capital account management

The RER policies play an important role in exports-imports and promoting the trade policies of a country. It manages the cyclical swings of capital flows and effectively manages the technological contents which are a key to economic growth. This paper, with its focus on the exchange rate, bring these two literatures together, and in doing so extends the precision and reach of each, arguing that (a) having a competitive and stable RER can be an important instrument for both macro-stability and development, (b) the effects are intertwined and complementary. Thus, the study is a detailed version of the factors that are affected for making an effective RER and how it, in turn, affect other trade policies between countries.

(Zahonogo, 4 Sept, 2015) studied that, the relation between trade openness and economic development is widely controversial. Trade liberalization has become widespread over the past three decades especially after the various strategies adopted by the countries. One of them: "Import reduction, Export promotion". Trade liberalization, thus, the removal or reduction of restrictions or barriers on the free exchange of goods between nations. These barriers contain tariffs, such as duties and surcharges, and nontariff barriers, such as licensing rules and quotas. According to the researcher, while conventional wisdom predicts a growth-enhancing effect of trade, recent developments suggest that trade openness is not always beneficial to economic growth. Economic growth is generated through increased international trade from the direct import of high-tech goods that facilitates the diffusion of knowledge and technology. It is also believed that trade relations affect the economy in two dynamics, in the short-run, trade reduces resource use misallocation; in the long run, it facilitates the transfer of technological development. Developing countries use it for business simulation. The evidence for growth enhancements through trade liberalization displays mixed effects because of problems with misspecification and the diversity among the liberalization indices used. Sometimes, higher trade openness may affect the economic growth. Developing countries has to be very cautious while promoting towards trade policies or while trading between different countries. Thus, the author stated how trade policies or exchange of products between different countries may negatively affect the growth of the developing economy and how might possibly use it for faster enhancement.

(Geetilaxmi Mohapatra, 2016), in their work stated that, the purpose of the paper is to examine the effectiveness of foreign aid in Indian economy. Developing countries are characterized as capital resource constrained economies. Thus, such countries must take aid from foreign countries to fulfil their needs. The macroeconomic policies of the country bring in great effectiveness in the development of the country. According to the paper, it was pointed out "(a) aid increases investment, in physical and human capital; (b) aid increases the capacity to import capital goods or technology; (c) aid does not have indirect effects that decrease investment or savings rates; and aid is allied with technology transfer that increases the productivity of capital and promotes endogenous technical change". According to McGillivray et al. (2006), four major alternate views on the efficacy of aid, such as, (a) aid has decreasing returns, (b) aid effectiveness is influenced by external and climatic conditions, (c) aid effectiveness is influenced by political conditions, and (d) aid effectiveness depends on institutional excellence.

Thus, there are two contradictory pros and cons that the writers have worked on. In conclusion, the writer said that India is a flexible economy. It is difficult to examine the effectiveness of foreign aid in the Indian economy with the constant changes in the economy. The country is trying to become independent and promote more exports. In such cases, it is difficult to understand the dependency of the country on foreign trade.

(Lopez, March 1991), determined that, the relation between trade strategy and economic growth has attracted a lot of researchers to understand it more closely. It is believed that trade/macro-economic policies play more important role in economic growth than neoclassical growth model. Most countries that follow a distinguished real exchange rate regime, is more developed than any other country. There might be a possibility that trade strategy and economic growth are not inter-related, but there are other factors of the country that might contribute to its growth. There are no strong proofs about the influence of trade strategy on economic growth and may be subjective in everyone's opinion. According to the author, two other mechanisms by which trade/macro policies can affect growth at least in the intermediate run, which have received little attention are the following: (i) the effect of economic instability (in particular exchange rate instability) on productivity growth that ex-ante unsustainable trade/macro policies may generate, and (ii) the effects of these policies on capital accumulation. Unsustainable strategies are those that follow a combination of macro and trade policies that are not consistent with external equilibrium. As suggested, the data provided in the paper is to provide some cross-country external references to prove the theorem that trade policies are linked directly with economic performance of a country.

(Dr. Kamala Dawar, February 19, 2019) mentioned that, both United Kingdom and Canada are going through economic uncertainty and thrive to executively manage their trade relations with other countries. They have prospered respectively in their economic prosperity. Although UK's withdrawal from European Union (EU) post- Brexit has threatened stability in the economy. Thus, the country had to redesign its policy to regain

its stability and prosperity. UK and Canada made each other their largest trading partners and garnered their resources in a way that no-one could have imagined. Although, such trade relations have gained both the countries respectively. The paper discussed about the prospects of free trade policies between the countries. The best practices that can be adopted to make it more gainful and promote exports and imports in such a way that the countries earn maximum profits for the economy. According to the author, Brexit will decrease income per capita in the UK. To mitigate the economic costs of leaving, the UK should remain closely integrated into the Single Market and maintain similar access to other partner countries that the UK currently enjoys through EU membership, including Canada. Thus, the whole paper was a detailed discussion on Canada-European Union Comprehensive Economic and Trade Agreement (CETA) and the prospects of a new Canada-UK Free Trade Agreement (FTA).

(Balassa, November 1983) studied that, during the 1973 oil crisis, members of the Organization of Arab Petroleum Exporting Countries proclaimed an oil embargo. The embargo was targeted at nations that were allegedly supporting Israel during the Yom Kippur War. This external shock had affected the investment rates, rate of growth of the labour force and overall, the economic development. The paper is directed towards the factor that how trade policy of one country has affected 43 other countries similarly. The main reason to include exports policy, together with capital and labour, in a production-framework was to test the hypothesis of production affecting factors. The results obtained in all three studies show that exports significantly contributed to the rate of economic growth in an intercountry relationship while raising the explanatory power of the estimating equations to a considerable extent. The outcome of the research indicated the possibilities for low-income countries. It gave opinion on ways to speed up their economic development through the application of advanced technology in an appropriate policy framework as well as the advantages of relying on manufactured exports.

(Krishnan, 2016) examined, stating that the developing state-based policies in trade versus the current neoliberal trade countries. Neoliberalism explains to market-oriented policies such as eliminating rate controls, liberalizing capital markets, lowering trade barriers and decreasing state influence in the economy, mainly through privatization and austerity. It is also called the root of all problems. A country that restricts itself from communicating with other countries can affect the economic development of other countries as well. Uganda was a country with neoliberal trade policies. Thus, the paper discusses about the possibilities of trade reforms that a country like Uganda must go through to achieve rapid development. It also focuses on keeping intact the prevalent industrial growth in the country and, also keeping in mind that there is no further loss in the market access. A country must not sacrifice its human or industrial inclusion to reach out globally. Currently, the government and civil society lack the expertise and capacity to build and negotiate a trade position that will help them rapidly develop. Ultimately, this is due to unbalanced power dynamics within the World Trade Organization (WTO) and other international organizations. The result of this has been that Uganda has implemented liberalized trade policies against their national interests causing domestic markets to be heavily exploited by developed countries, leading to a huge trade deficit of over \$4bn. Thus, the paper is a detailed study on the economic or trade policies a country must follow effectively for a balanced and overall growth.

(Kennedy, 2007) assumed that, the foreign policies are affected by 3 major factors, known as 3i's- interest groups, international structure, and ideas. Although there had been researches about the trade policies affecting other countries or economic development, nevertheless observed not much idea about the factors affecting the factors/decisions in changing or altering the trade policies in the first place. It was identified that there had also been a lack of work dealing with the implications of government interests outside of real political discussions about the relationship between trade and national security. The paper seeks to contribute to the understanding of trade policy through a study of liberalization in two samples of countries. First, it looked at the process of liberalization in 25 democratizing countries in Eastern Europe and the former Soviet Union from 1991 to 1999. Second, the sample was expanded through a cross-sectional study of 124 countries. The study contends that a key element in the choice of trade policies is the level of fragmentation of economic accountability. Such fragmentation consisted of two major components: (1) the existence of a strong capitalist class that was independent of the government; and (2) the dispersion of political power among many actors both inside and outside the government. In conclusion, the paper showed that significant government ownership of the productive resources of a country had a negative impact on the trade liberalization. It affected the flexibility of the country and restricted it from reaching out to other countries for any kind of monetary or fiscal support.

(Meoqui, December, 2010) found that, the main aim of the study was to make recommendation for effective international trade policy for developing countries grounded on rigorous theories. It was believed by the writer that trade policies were often made on unexpected theories and assumptions that gives no result when applied in the practical world. He made studies on the principles stated by classical political economists Adam Smith and David Ricardo. The free trade policies, for instance, formulated by these famous economists were made on realistic situations but was considered a little difficult to implement. Thus, the paper had done a

detailed study on how to implement the policies of Classical Free Trade in an economy for more effective results. Whilst, Free Trade Policies are implemented by the government to improve flexibility of trade between countries by imposing absolutely no taxes in the transactions that takes place. But an unmindful imposing of such policy may lead to continuous deficit for the country or leading to absolutely no returns. Thus, every trade policy plays an important role for the economy and its connecting countries as well.

(**Bernard Heokman, October, 2002**) in their study analyzed that, the World Trade Organisation (WTO) makes decisions on its core principles based on absolute transparency and non-discrimination. It ensures that there is healthy competition between countries. Although, it is sometimes depicted that WTO may make decisions without considering low-income countries, countries with special economic needs, need to assess where to invest scarce human resources, both across policy domains etc. Thus, there was an idea of forming an International Trade Organization (ITO) that might investigate the matters of each country and make decisions considering all factors. Countries argue over the WTO factor of 'one size fits all'. Every country is different in its own way and has special needs. Hence, there had been meetings at the WTO and the countries had demanded a board that would make decisions based on the factors of each country. In the paper, the author discussed about the pros and cons that a country might face if such a board is passed. He also said that, he relative payoffs, continuing traditional liberalization of entry into markets would be greater than investment of significant resources into development of competition law disciplines, at both the national and multilateral levels, where the priorities must lie on a country-by-country basis.

(**Ravichandran, March 2013**) discussed the changes in business model of two companies, Amul and Nestle with respect to trade policies. They investigated that the number of forces that shape the two-way interaction between the changing business model structures of Amul and Nestle, and the rules-based trading system. They observed that there was a little doubt that policy changes and trade rulemaking were closely related to the process of business model evolution. Post liberalization it had been observed that the companies changed the way they were doing business earlier and that trade policy has an important corresponding role to play in helping companies to develop and change their models. They analysed that the role of trade policy in the development of a business model.

(**Gaur, June 2016**) analysed in their study that in the dominance of imports over exports in the foreign trade structure of India highlighting the higher mean and growth rate of imports as compared to exports which could be considered as the major flaw in India's trade portfolio liable for the failure of Indian economic policies on the trade front. Moreover, the exports of agriculture & allied products could be considered as the most profitable opportunity for India with a very high present value and growth potential while the oil exports of India constitute the doubtful prospects displaying very weak current trend but a very high growth potential. Hence, the study concluded that the Liberalisation, Privatisation and Globalisation (LPG) reforms under New Economic Policy did not speed up the process rather there was some indication of its failure on the balance of trade front. Contrary to the claim made in the New Economic Policy of 1991, exports did not pick up at the required level, while imports accelerated significantly. It indicated that economic and trade liberalization had not yet succeeded in bringing far-reaching changes in India's foreign trade which reflects pre-reform strategy to a large extent. Changes occurred after 1992 with liberalization of trade. Trade liberalization had encouraging effect primarily in the immediate post-reform phase. However, the export sector is not sufficiently diversified and still dominated by simple and undifferentiated products with low levels of skill and simple technologies, and for which India's comparative advantage lies in cheap labour. Due to this specialization India exports primarily those products for which international demand is increasing slowly. India's exports were thus concentrated in low technology products and slow growing markets which is the main reason of unsatisfactory export performance of the country even after the introduction of LPG reforms initiated in 1991.

III. RESEARCH OBJECTIVES

- To understand the effect of changes of the Trade Policies in Indian Economy.
- To correlate the effect of Trade Policies on Human Development Index (HDI).
- To analyse the imports and exports of India, due to changes in the Trade Policies.

IV. RESEARCH METHODOLOGY

Sample Size

- Ten calendar years data from 2009 to 2018 of India (in terms of currency i.e. Rupees) of:

A. Dependent values/ Variable values

1. Human Development Index (HDI)

B. Independent values/ Constant values

1. Import values
2. Export values
3. Exchange rates

4. CPI Inflation rates / Retail Inflation rates
 - Ten calendar years average currency rates from 2009 to 2018 of four major currencies, namely:
 1. US Dollar - USD
 2. Great Britain Pound - GBP
 3. Euro - EUR
 4. Japanese Yen - JPY

Data Analysis Technique

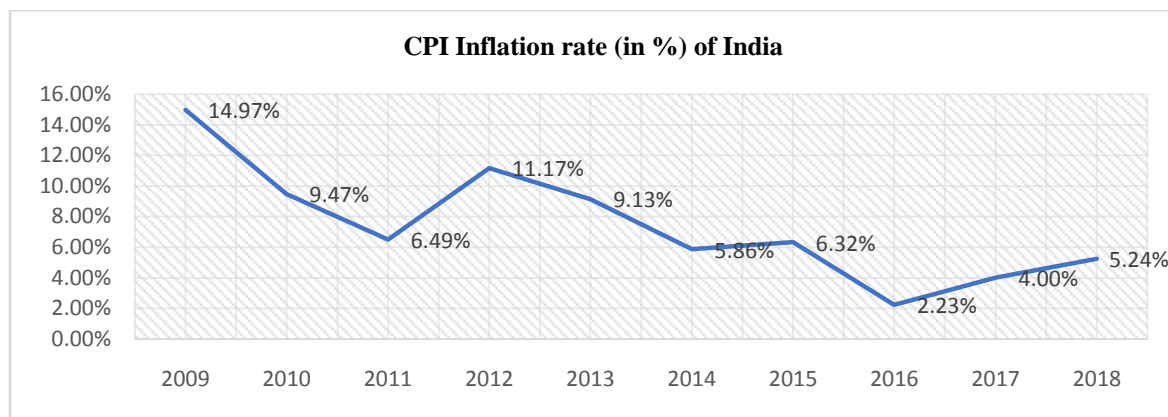
- **Hypothesis Testing/ T-testing:** It is used to prove hypothesis that has formed as below:
 - ❑ **H₀ / Null Hypothesis:** There is no influence of import values, export values, exchange rates and CPI inflation rates on HDI with reference to Indian Economy.
 - ❑ **H₁ / Alternative Hypothesis:** Import values, export values, exchange rates and CPI inflation rates have influence on HDI with reference to Indian Economy.
- **Regression Analysis:** It is used to know the strength or goodness of the model. Also, regression is used to understand which independent values impact the most, in which direction and by how much on the dependent values.

Data Analysis

A. The CPI Inflation rates of India, for ten calendar years from the 2009 to 2018 are as follows:

Year	CPI Inflation Rate (in %)
CPI India 2009	14.97 %
CPI India 2010	9.47 %
CPI India 2011	6.49 %
CPI India 2012	11.17 %
CPI India 2013	9.13 %
CPI India 2014	5.86 %
CPI India 2015	6.32 %
CPI India 2016	2.23 %
CPI India 2017	4.00 %
CPI India 2018	5.24 %

Source: <https://www.inflation.eu/inflation-rates/india/historic-inflation/cpi-inflation-india.aspx>



Interpretation:

CPI inflation is a macroeconomic indicator of inflation. The graph above indicates that the CPI inflation rate has decreased from 14.97% in the year 2009 to 5.24% in 2018. CPI inflation rate in India does not merely depend on, monetary policy decisions made every year to keep GDP intact but also on factors such as:

1. **Demand factors:** It occurs in a situation when the aggregate demand in the economy has exceeded the aggregate supply.
2. **Supply factors:** The supply side inflation is the main reason or feature for the rising inflation in India. An increase in the cost of production often increases the value of the final output produced i.e. Cost-push inflation. The supply-driven factors have a fiscal tool for regulation and moderation. The global level impacts of price rise often impact inflation from the supply side of the economy. A higher inflation rate also constraints India's manufacturing environment.

3. Domestic Factors: Developing economies as India have generally a lesser developed financial market which creates a weak bonding between the interest rates and the aggregate demand. The money supply increases very quickly while the supply of goods takes more time resulting in increased inflation.

4. External Factors: The nominal exchange rate and import inflation are the measures that depict the competitiveness and challenges for the economy. For example, the prices in the United States rises it impacts India where the commodities are now imported at a higher price impacting the price rise.

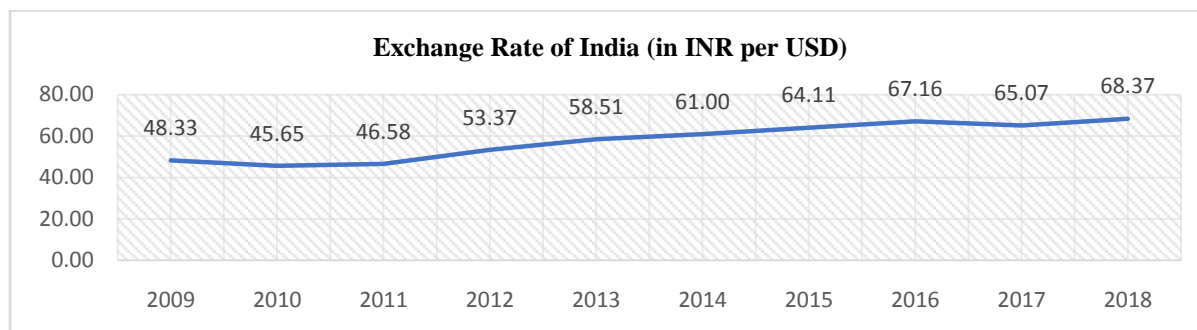
India is a developing country and requires capital investment and technological advancements at its disposal, for which India imports sophisticated technology, oil, heavy machinery, electronics, etc. to meet its domestic demand. This draw “Imported Inflation” into the economy, raising the price of the general price levels of all goods.

The Monetary Policy Committee (MPC) in February 2020 decided the objective of achieving the medium-term target for CPI inflation of 4% within a band of +/- 2% while supporting growth. It made no changes in the inflation rates but reduced the general interest rates of the economy, making way to lower-earning capacities for higher prices to pay for the people of India. Thus, making its direct impact on HDI and Economic growth of India.

B. The Exchange Rate of India, for ten calendar years from the 2009 to 2018 are as follows:

Year	Amount (in INR per USD)
01-01-2009	48.3324
01-01-2010	45.6507
01-01-2011	46.5782
01-01-2012	53.3743
01-01-2013	58.5149
01-01-2014	60.9953
01-01-2015	64.1073
01-01-2016	67.1572
01-01-2017	65.0659
01-01-2018	68.3734

Source: <https://data.gov.in/keywords/exchange-rate>



Interpretation:

After the change of the governance of the country in the year 2014, there was a huge change in the exchange rate, having a constantly increasing trend. There has been an increase of approximately 12% in the exchange rate between the year 2014-2018 as compared to an increase of 21% between the year 2009-2013. It indicates that the growth of the economy has been better in the second half i.e., 2014-2019. The exchange rate of India enhanced Rs.48.33 per USD 2009 to Rs.68.37 per USD in 2018, the major factors behind the rise in the exchange rates in India were:

1. Purchasing Power Parity / Relative Price Levels: If there are no restrictions imposed on trade by the countries the exchange rate between two national currencies can adjust freely. And assuming that the costs of goods transportation between two or more countries were nil, then the exchange rate between the currencies would also be considered the differences in the price levels in these countries.

2. Rate of Inflation: A relatively higher rate of inflation causing a rise in prices of the goods in India as compared to those in the United States of America (USA) would make US goods relatively cheaper and the Indian goods expensive. This would serve as a stimulus for the Indian people and firms to increase their imports of goods from the USA. This would raise the demand for US dollars in the foreign exchange market. However, at the same time due to the higher price level American people would find Indian goods more expensive that would cause a decline in exports of goods from India to the USA. Both these effects of a higher price level due to a higher rate of inflation in a country would cause the foreign exchange rate of the dollar in terms of rupees to

rise and the price of the Indian rupee in terms of the dollar will fall. Thus, as a result of the higher rate of inflation in India, the US dollar -would appreciate and the Indian rupee will depreciate.

3. Interests Rates: Another critical factor affecting the exchange rate is the country’s interest rate compared to the interest rate of other countries with which it exchanges its goods. Simply put, higher interest rates in a country increase the value of that country's currency relative to nations offering lower interest rates. Broadly, higher interest rates tend to attract more foreign investment, which results in an increased demand and value of the home country's currency. On the other hand, lower interest rates tend to be unappealing for foreign investment and results in decrease in the currency's relative value.

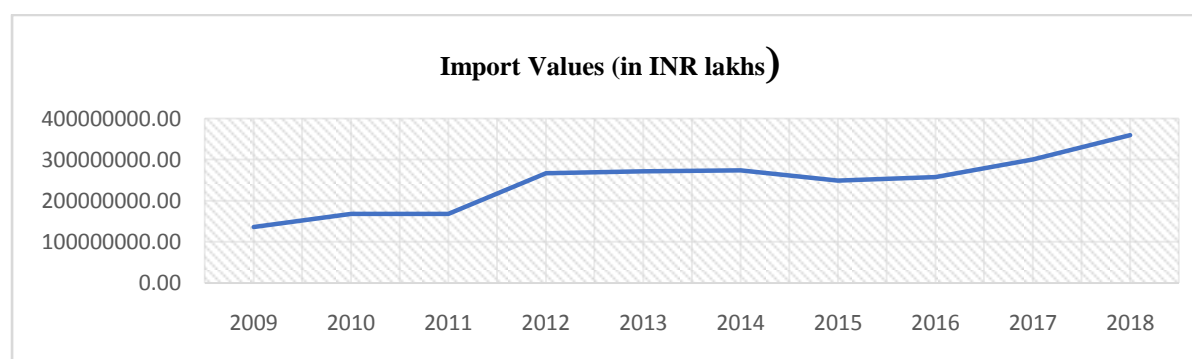
Capital Flows: Relative interest rate affects the exchange rate through changes in capital flows. But capital flows of a country are not perceived by relative interest rate alone. Besides, capital inflows in India occur when Foreign Institutional Investors (FII) and Non-resident Indians buy in the equity (i.e., share capital) of Indian Companies in the Indian stock market. On the other hand, when the Indian business class invests abroad, capital outflows from India occur. It may be noted that these capital inflows and capital outflows are recorded in the capital account of the balance of payments. On the other hand, trade of goods and services are recorded in the current account of the balance of payments.

In the long run, the exchange rate and GDP may not drift apart, but in the short run, their relationship is weak and indirect. India’s Economic growth are positively affected by fiscal and monetary factors. The long-term effects are predicted in models which assume market distortions such as knowledge issues or product market failures. In this short run when some prices in the economy can be sickly movements in nominal exchange rates can alter relative prices and affect international trade flows. These short-run effects, however, are not straight forward, as they are likely to depend on specific characters of the economy, including the currency in which domestic producers invoice their products and the structure of the trade. Our findings indicate that trade liberalization can preserve tax yield if accompanied by adequately supportive monetary policies, may.

C. The import that has taken place in the last 10 years are as follows:

Year	Imports (in lakhs)
2009	13,63,73,554.76
2010	16,83,46,695.57
2011	16,83,46,695.57
2012	26,69,16,195.69
2013	27,15,43,390.74
2014	27,37,08,657.84
2015	24,90,30,553.78
2016	25,77,67,536.68
2017	30,01,03,343.35
2018	35,94,67,461.19

Source: <https://commerce-app.gov.in/eidb/icntq.asp>



Interpretation:

The graph suggests that the imports between 2014-18 has increased by approx. 31% from being Rs. 27,37,08,657.84 Lakh in 2014 to Rs. 35,94,67,461.19 Lakh in 2018, respectively. Whereas the imports between 2009 to 2018 has increased by approximately 163.59% from Rs. 13,63,73,554.76 Lakh in 2009 to Rs. 35,94,67,461.19 Lakh in 2018 correspondingly.

For a developing economy, like India, it is important to resort to imports. All export and import-related actions are directed by the Foreign Trade Policy (FTP) which intentions at improving the country's exports and use trade expansion as an effective instrument of economic growth and employment generation. The Central Board of Excise and Customs (CBEC) created an 'integrated declaration' process initiating the creation of a

solitary window which will provide the importers and exporters a single point interface for customs flexibility of the imported and exported goods.

Import policy of India is influenced by the pace of industrialization, domestic market imperfections, employment opportunities, investment for raising profit, improvement in terms of trade, smuggling practices, the balance of payment position, export promotion, import-substitution, self-reliance etc. India's trade policy transition into a globally oriented economy aims at export promotion to raise export earnings and import liberalization measures are used as pre-requisites for expansion of exports.

The import policy has the following objectives:

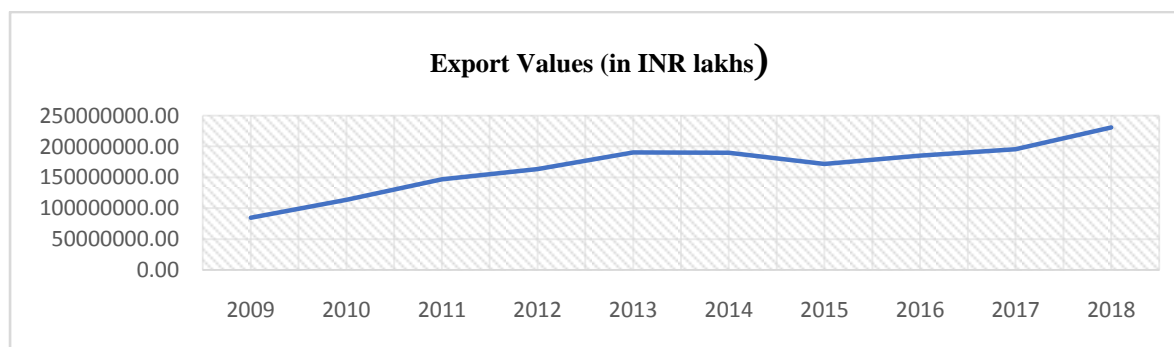
1. The easy availability of essential imported goods, including capital goods for modernizing and upgrading technology.
2. To improve and streamline systems for import permitting.
3. Efficient import substitution and self-reliance, industrialization, technological upgradation and modernization.
4. Domestic prices stabilization.

Ms. Nirmala Sitharaman, Minister of State for Commerce & Industry (Independent Charge), Government of India unveiled the Foreign Trade Policy (FTP) on April 1, 2015. The measures in the policy were adopted to nudge procurement of capital goods from indigenous manufacturers under the export promotion capital goods Export Promotion Capital Goods (EPCG) scheme by decreasing specific export prerequisite to 75 per cent of the normal export requirement.

D. The export that has taken place in the last 10 years are as follows:

Year	Exports (In Lakhs)
2009	84553364.38
2010	113696426.4
2011	146595940
2012	163431829
2013	190501108.9
2014	189634841.8
2015	171638440.4
2016	184943355.3
2017	195651452.8
2018	230772619.4

Source: <https://commerce-app.gov.in/eidb/ecntq.asp>



Interpretation:

The exports in the year 2009 were Rs.84553364.38 Lakh, from there they gradually grew to Rs. 230772619.4 Lakh in the year 2018. Ideally a country must always induce the policy of 'less import, more export'.

Government of India Ministry of Commerce & Industry, India's Foreign Trade stated in December 2019, that the total exports from India (Merchandise and Services) registered a growth of 0.93 per cent year-on-year during April-December 2019, while total imports, exhibiting a negative growth of (-)5.82 per cent over the same period. According to Mr Piyush Goyal, Minister for Commerce and Industry, the Government of India is keen to grow exports and provide more jobs for the young, talented, well-educated and even semi-skilled and unskilled workforce of India.

The FTP estimate that, India's exports are expected reach US\$ 330-340 billion by 2019-20 according to Federation of India Export Organization (FIEO). It is estimated that by 2020, India's share in world trade is

expected to double from the present level of three percent. In line with the ‘Make In India’ programme, FTP 2015-20 provides a structure for growing exports of goods and services, as well as employment creation and increased value addition in the country.

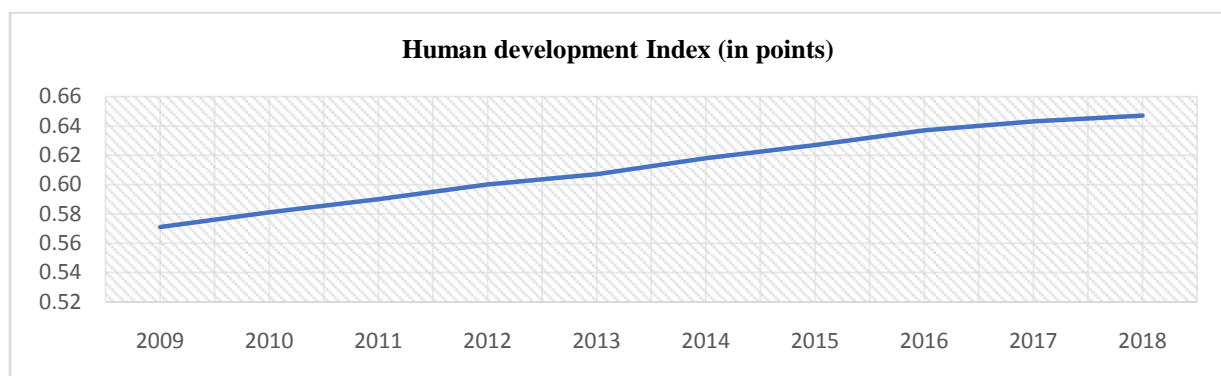
Some of the strategies are as follows:

- In the Mid-Term Review of FTP 2015-20 the Ministry of Commerce and Industry has enhanced the scope of Merchandise Exports from India Scheme (MEIS) and Service Exports from India Scheme (SEIS) by 2 per cent.
- The Government of India aims to set up trade promotion bodies in 15 countries to raise exports from small and medium-sized enterprises (SMEs) to India by December 2018.
- India has signed a Comprehensive Economic Partnership Agreement with South Korea as part of the FT P market expansion plan, which will provide enhanced market access for the Indian exports.
- RBI has simplified the credit rules for exporters, by means of which they can now receive long-term advance payments from banks for up to 10 years to service their contracts. This measure will help exporters to enter long-term contracts while improving the overall export output.
- It is anticipated that the Indian Government will announce an interest subsidy scheme for exporters in order to increase the exports and explore new markets.
- Several steps have been taken to increase the exports of defence and hi-tech items.
- Several steps have been taken for encouraging manufacturing and exports under 100 per cent Export Oriented Units (EOU)/ Electronic Hardware Technology Park (EHTP)/Software Technology Parks of India (STPI)/Bio-Technology Park (BTP) Schemes. The actions include a speedy clearance facility for these units, allowing them to share infrastructure facilities, approving inter unit transfer of goods and services, permitting them to establish warehouses adjacent to the port of export and to use duty free equipment for training purposes.

E. The Human Development Index (HDI) from the last 10 years are as follows:

Year	Rate
01-01-2009	0.571
01-01-2010	0.581
01-01-2011	0.590
01-01-2012	0.600
01-01-2013	0.607
01-01-2014	0.618
01-01-2015	0.627
01-01-2016	0.637
01-01-2017	0.643
01-01-2018	0.647

Source: <http://hdr.undp.org/en/data#>



Interpretation:

The human development index (HDI) grew from a 0.571 in the year 2008 to 0.647 in the year 2019. The HDI is a dependent variable on the above 4 factors, namely, exchange rate, inflation rate, imports and exports of the country. There has been a constant increase in the HDI which is also an indicator of Economic Growth depicting the general growth of the Purchasing capacity and living standards of the people.

The HDI is a degree for assessing long-term development in three simple dimensions of human improvement: a protracted and healthy lifestyle, access to know-how and a decent living standard. India climbed one spot to 130

amongst 189 countries in the latest human development index released by the United Nations Development Programme.

Between 1990 and 2017, India's life expectancy at birth grew by almost 11 years, with remarkable gains in expected years of schooling. On the other hand, India's gross national income per capita increased by a staggering 266.6 percent between 1990 and 2017. About 26.8 percent of India's HDI value is lost because of inequalities. This confirms that inequality still remains a challenge for the Indian economy as it progresses on other fields. In India, despite considerable progress in the policy and legislative levels, women remain significantly less involved politically, economically, and socially as compared to men.

When one talks about the Human Development Index, the focus should be on the availability of resources for human being and satisfaction as the citizen of a country. "Capabilities approach" created by Nobel Prize-winning economist Amartya Sen. According to this, the "human development" has come to mean "a widening of choices, an enhancement of freedom and fulfillment of human rights. Rising incomes and expanding outputs in the Human Development framework are the means not the ends of development". In human development approaches, people are the decisive end of development. Hence, people are the center of human development analysis.

Human development has two perspectives: (a) The formation of human capabilities, which reflects the combinations of functioning; (b) The real opportunity to accomplish what one values, whether it is economic, political, social, or culture, by using these acquired capabilities.

✚ **The T-test hypothesis for each factor individually has been calculated as follows:**

A. T-test paired with Exchange Rate:

t-Test: Paired Two Sample for Means		
	HDI	Exchange Rate
Mean	0.6121	57.81496
Variance	0.000707433	76.15607306
Observations	10	10
Pearson Correlation	0.959418762	
Hypothesized Mean Difference	0	
Df	9	
t Stat	-20.78916808	
P(T<=t) one-tail	3.22615E-09	
t Critical one-tail	1.833112933	
P(T<=t) two-tail	6.45229E-09	
t Critical two-tail	2.262157163	

Interpretation:

From above table, exchange rate has a correlation of positive 95% which shows the very strong relation between HDI and Exchange rate in direct relationship. The absolute value of t Stat being 20.78916808 is greater than t Critical two tail being 2.262157163 which tells us that we reject Null Hypothesis. Also, the absolute value of P(T<=t) two tail being (6.45229) ⁻⁹ is smaller than 0.05, we reject Null Hypothesis and accept Alternative Hypothesis.

B. T-test paired with Inflation rate:

t-Test: Paired Two Sample for Means		
	HDI	Inflation Rate
Mean	0.6121	7.488
Variance	0.000707433	14.00430667
Observations	10	10
Pearson Correlation	-0.830742803	
Hypothesized Mean Difference	0	
Df	9	
t Stat	-5.776152654	
P(T<=t) one-tail	0.000133677	
t Critical one-tail	1.833112933	
P(T<=t) two-tail	0.000267355	
t Critical two-tail	2.262157163	

Interpretation:

From the above table, inflation rate has a correlation of negative 83% which shows that there is strong relation between HDI and Inflation rate in inverse relationship direction. The absolute value of t Stat being

5.776152654 is greater than t Critical two tail being 2.262157163 which tells us that we reject Null Hypothesis. Also, the absolute value of P(T<=t) two tail being 0.000267355 is smaller than 0.05, we reject Null Hypothesis and accept Alternative Hypothesis.

C. T-test paired with imports:

t-Test: Paired Two Sample for Means		
	HDI	Import
Mean	0.6121	245160408.5
Variance	0.000707433	4.65316E+15
Observations	10	10
Pearson Correlation	0.881065547	
Hypothesized Mean Difference	0	
Df	9	
t Stat	-11.36518644	
P(T<=t) one-tail	6.10836E-07	
t Critical one-tail	1.833112933	
P(T<=t) two-tail	1.22167E-06	
t Critical two-tail	2.262157163	

Interpretation:

From the above table, inflation rate has a correlation of positive 88% which shows that there is strong relation between HDI and Imports direct relationship direction. The absolute value of t Stat being 11.36518644 is greater than t Critical two tail being 2.262157163 which tells us that we reject Null Hypothesis. Also, the absolute value of P(T<=t) two tail being (1.22167) (^-6) is smaller than 0.05, we reject Null Hypothesis and accept Alternative Hypothesis.

D. T-test paired with Exports:

T-test paired with Exports		
	HDI	Export
Mean	0.6121	167141937.8
Variance	0.000707433	1.81817E+15
Observations	10	10
Pearson Correlation	0.899470155	
Hypothesized Mean Difference	0	
Df	9	
t Stat	-12.39561252	
P(T<=t) one-tail	2.91915E-07	
t Critical one-tail	1.833112933	
P(T<=t) two-tail	5.83829E-07	
t Critical two-tail	2.262157163	

Interpretation:

From the above table, inflation rate has a correlation of positive 89% which shows that there is strong relation between HDI and Exports in direct relationship direction. The absolute value of t Stat being 12.39561252 is greater than t Critical two tail being 2.262157163 which tells us that we reject Null Hypothesis. Also, the absolute value of P(T<=t) two tail being (5.83829) ^ (-07) is smaller than 0.05, we reject Null Hypothesis and accept Alternative Hypothesis.

The Regression Test carried for all the factors has been calculated as follows:

Summary Output	
Regression Statistics	
Multiple R	0.993459592
R Square	0.98696196
Adjusted R Square	0.976531529
Standard Error	0.004074602
Observations	10
ANOVA	

	Df	SS	MS	F	Significance F
Regression	4	0.006283888	0.001570972	94.62330929	6.73031E-05
Residual	5	8.30119E-05	1.66024E-05		
Total	9	0.0063669			
	Coefficients	Standard Error	t Stat	P-value	
Import	2.27013E-10	9.75885E-11	2.326231262	0.067527393	
Export	-2.27486E-10	1.61998E-10	-1.404252019	0.219210092	
Exchange Rate	0.001408163	0.000368871	3.817494768	0.012404792	
Inflation Rate	-0.003069307	0.000789814	-3.886115965	0.011570204	

Interpretation:

The R Square value being 0.98696196 tells us the strength of the regression table and the bond between the independent variables and the dependent variables. R Square depicts that 98.696196% of the change in dependent variable (HDI) is explained by the independent variables (Import values, Export values, Inflation Rates and Exchange Rates).

The Significance F value shows the strength of the Regression model and is far less than 0.05 being, (6.73031) ^-05 which shows that the regression model is highly significant on whole.

The P-value of Exports is 0.219210092 which is the highest among the rest of the independent variables, and also is larger than 0.05, which tells us that Exports do not have much impact on HDI. But a single unit change in Exports leads to the negative (-2.27486) ^-10 units change in HDI.

The P-value of Imports is 0.067527393 which is the second highest among the rest of the independent variables, and also is larger than 0.05, which tells us that Imports do not have significant impact on HDI. But a single unit change in Imports leads to the positive (2.27013) ^-10 units change in HDI.

The P-value of Exchange Rate is 0.012404792 which is the third highest among the rest of the independent variables, and also is smaller than 0.05, which tells us that Exchange Rates do have significant impact on HDI. And a single unit change in Exchange Rate leads to the positive (0.001408163) units change in HDI.

The P-value of Inflation Rate is 0.011570204 which is the least high among all of the independent variables, and also is smaller than 0.05, which tells us that Inflation Rates do have much higher significant impact on HDI. And also, a single unit change in Inflation Rate leads to the negative (-0.003069307) units change in HDI.

V. FINDINGS AND CONCLUSIONS

Through the T-Test Analysis, it was found out that all four variables, namely, Exchange Rate, Inflation Rate, Imports and Exports influence the Human Development Index or the Economic development of a country. The above factors are a way of investment for the citizens and also an efficient way to trade between countries. Every trade policy is designed keeping the above factors in mind. With more exports, a country has more opportunities to work towards trade surplus. A country will export the goods that it has in abundance. According to the annual report of 2018, released by the Ministry of Commerce, India’s major exporting goods are: (a) Mineral fuels including oil: US\$48.3 billion (14.9% of total exports) (b) Gems, precious metals: \$40.1 billion (12.4%) (c) Machinery including computers: \$20.4 billion (6.3%) (d) Vehicles: \$18.2 billion (5.6%) (e) Organic chemicals: \$17.7 billion (5.5%) (f) Pharmaceuticals: \$14.3 billion (4.4%) (g) Electrical machinery, equipment: \$11.8 billion (3.6%) (h) Iron, steel: \$10 billion (3.1%) (i) Cotton: \$8.1 billion (2.5%) (j) Clothing, accessories (not knit or crochet): \$8.1 billion (2.5%). Interestingly, India’s top 10 exports accounted for just over three-fifths (61%) of the overall value of its global shipments.

On the other hand, developing countries like India need support in terms of technological advances and other resources that are not available in the country. An open trade policy is followed by the Indian economy, where most products can be imported without any licence on payment of duty. Imports make the Indian economy efficient and vibrant. However, like all good things, imports also come with limitations. Renewed focus on the exploration of Indian resources and consumption will help to maintain a positive balance of trade.

Exchange rates determine the frequency or the amount at which goods are traded between countries. When the exchange rate is high, for e.g., 1= \$70.80, a country will restrict its imports and encourage more exports. This will increase the foreign investments and boosts its returns. In return, exchange rates will increase the balance of trade and boost the surplus of the country. People also trade/invest in foreign currency, to get higher return on investments.

Inflation is the rate at which the price of the goods and commodities increase. It helps the economy to boost its growth. It increases one’s cost of living, in simpler terms, it affects the purchasing power of the

economy. It indicates the effect of demand and supply in the economy. Technically, when the supply of a good/foreign currency increases, its price will decrease again resulting in more demand. Higher demand overtime increases the price of the good/foreign currency. This process overtime leads to inflation. Thus, inflation helps in the balanced growth in an economy. Meanwhile, hyper-inflation leads to adverse condition for the country and creates an unrest among the investors and traders.

Thus, the above factors affect HDI or Human Development Index majorly in different ways. Although there are other factors that affect the economic growth and development, but they don't have any major impact on it.

Secondly, through the Regression Analysis, it was found that Import and Exchange Rate are positively related with HDI. Hence, when Import and Exchange Rate are going up, there will be positive impact on Human Development Index. Imports make variance of products available to the residents of the country. It increases their level of satisfaction, thus, increasing the HDI. Increase in Exchange Rate will also have a positive impact on HDI. Higher exchange rate means more investments and returns. It'll give a positive impact on the traders and the trade balance of the economy.

On the other hand, Inflation and Exports result in negative impact on HDI. Inflation leads to decrease in the purchasing power of the people and reduction in the value of money. Thus, deflation is always good news for the people leading to a positive HDI. It gives more power in the hands of the consumer. Whilst, exports although lead to a positive trade of balance, there are times when countries sacrifice their resources on the urge to earn profits. Similarly, for developing countries like India, that has minimum resources, the country must earn to make use of its maximum resources before exporting them.

The assimilation of the domestic economic system through the dual channels of trade and capital flows has enhanced in the past two decades which in turn led to the India's GDP reaching Rs 190.10 trillion (US\$ 2.72 trillion) in 2018-19. Concurrently, the per capita income also almost increased during these years. India's trade and external sector had a substantial impact on the GDP growth as well as development in per capita income.

VI. LIMITATIONS OF THE STUDY

There are many other factors that directly or indirectly affect the HDI of an economy, e.g., Government guidelines, RBI Policies, Interest Rates, Life Expectancy rates, etc. The factors that play a secondary role in the HDI has not been included in the research paper.

The research has taken place for the data collected in the past 10 years. We have taken in note the 4 major base currency that is valued higher than Indian Rupees, namely, Japanese Yen, Great Britain Pound, Euro and United states Dollar. Trade takes place between more than the above 4 currencies which has not been included in the research.

Various data analysis techniques are available but only two most important and widely used techniques that are considered while evaluating HDI.

REFERENCES:

- [1]. Balassa, B. (November 1983). Exports, Policy Choices, and Economic Growth in Developing Countries after the 1973 Oil Shock. *Journal of Development Economics* 18 (1985) 23-35. North-Holland.
- [2]. Bernard Hoekman, P. C. (October, 2002). Economic Development, Competition Policy, and the World Trade Organization. *Policy Research Working Paper*.
- [3]. Dr. Kamala Dawar, D. E.-K. (February 19, 2019). Canada-UK Free Trade: Balancing progressive trade policies and economic benefits.
- [4]. Gaur, K. S. (June 2016). Sectoral Diversification of India's Foreign Trade Portfolio: Exploring the Commodity Composition of India's Trade-Basket . *TSM Business Review, Vol. 4, No. 1*, 1-15.
- [5]. Geetilaxmi Mohapatra, A. G. (2016). Foreign aid, macroeconomic policies and economic growth nex in India: An ARDL bounds testing approach. *Theoretical and Applied Economics*, Volume XXIII, No. 4(609), Winter, pp. 183-202.
- [6]. Kennedy, R. (2007). Fragments of Economic Accountability and Trade Policy. *Foreign Policy Analysis* (2007) 3, 145-169.
- [7]. Krishnan, P. (2016). The Case for State-Led Trade Policies in Economic and Human Development. *Independent Study Project Collection*.
- [8]. Lopez, R. (March 1991). How Trade and Macroeconomic Policies Affect Economic growth and Capital Accumulation in Developing Countries. *Country Economics Department, The World Bank*, 30.
- [9]. Martin Guzman, J. A. (9 May, 2018). Real Exchange Rate Policies for Economic Development. *Elsevier, World Development* 110 (2018) 51-62.
- [10]. Meoqui, J. M. (December, 2010). Classical Free Trade: A Policy Towards Economic Growth and Development. *Doctoral thesis, WU Vienna University of Economics and Business*.
- [11]. Ravichandran, S. N. (March 2013). Trade Policies and Their Impact on Business Models: A Comparative Study. *The IUP Journal of Business Strategy, Vol. X, No. 1*, 20-30.
- [12]. Zahanogo, P. (4 Sept, 2015). Trade and economic growth in developing countries: Evidence from Sub-Saharan Africa. *Journal of African Trade* 3 (2016) 41-56.

BIBLIOGRAPHY:

- [1]. Human Development Index (HDI) - Our World in Data [ourworldindata.org](http://dataourworldindata.org)
- [2]. http://hdr.undp.org/sites/default/files/lao_2006_en.pdfhdr.undp.org

- [3]. UNCTAD/DITC/TAB/2005/1unctad.org
- [4]. Understanding continuing decline in Indian exports | ORFwww.orfonline.org
- [5]. Analysis of factors affecting the performance of exports in India | Request PDFwww.researchgate.net
- [6]. Foreign Trade Policy 2015-20: Key Highlightswww.ibef.org
- [7]. India New Foreign Trade Policy highlights 2011, 2010, 2009 - 2014 also called New Exim Policy.www.eximguru.com
- [8]. India's Import Policy: Procedures and Duties - India Briefing Newswww.india-briefing.com
- [9]. India's Exports: Policy Defeating Exchange Rate Arithmetic on JSTORwww.jstor.org
- [10]. Historic inflation India – historic CPI inflation Indiawww.inflation.eu
- [11]. CPI inflation: Latest News & Videos, Photos about CPI inflation | The Economic Timeseconomictimes.indiatimes.com
- [12]. India stuck low on UN development index | Business Standard Newswww.business-standard.com
- [13]. TRADE AND SOCIAL DEVELOPMENT: THE CASE OF ASIA
- [14]. Rupee not the only factor affecting India's export - The Financial Expresswww.financialexpress.com
- [15]. Why India's exports are declining? — Indian Economylms.indianeconomy.net
- [16]. Why India's exports are falling - The Hindu BusinessLinewww.thehindubusinessline.com
- [17]. IJAEBV9N4s.pdfndpublisher.in
- [18]. 5 Issues Government Could Address In EXIM Policy 2020 25-Pushkar Mukewar - BW Businessworldwww.businessworld.in
- [19]. Foreign Trade Policy (2015-20) (As on 30 June 2019) | Directorate General of Foreign Trade | Ministry of Commerce and Industry | Government of Indiadgft.gov.in
- [20]. 7 factors that influence exchange ratesalpari.com
- [21]. View: RBI does its bit; the ball is back in govt's court to revive growth - The Economic Timeseconomictimes.indiatimes.com

Prof. Uma Ghosh, et. al. "The Trade policies and Economic Development of India: An Empirical Study." *International Journal of Business and Management Invention (IJBMI)*, vol. 09(06), 2020, pp 40-54. Journal DOI- 10.35629/8028